

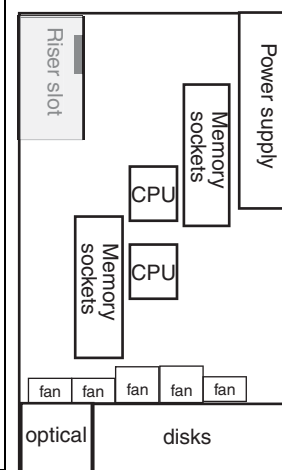
Name	Type-model	Slot x bay	Proc-processor(s)	GHz	Cores	Memory DIMMs	Memory speed	Disk size	RAID Battery	Disk bays	Disk type	SATA optical	RAID Int	System mgmt	Ethernet	Avail date
RD230	4011-16U	1x5	1xE5603	1.60	4	1x4GB	1333MHz	3.5"		4xHot-swap	SATA	DVD±RW	0/1/5/10	IPMI	2xGb	Mar 11
RD230	4011-17U	1x5	1xE5606	2.13	4	1x4GB	1333MHz	3.5"		4xHot-swap	SATA	DVD±RW	0/1/5/10	IPMI	2xGb	Mar 11
RD230	4011-18U	1x5	1xE5607	2.26	4	1x4GB	1333MHz	3.5"		4xHot-swap	SATA	DVD±RW	0/1/5/10	KVM	2xGb	Mar 11
RD230	4011-19U	1x5	1xE5620	2.40	4	1x4GB	1333MHz	3.5"		4xHot-swap	SATA	DVD±RW	0/1/5/10	KVM	2xGb	Mar 11
RD230	4011-1AU	1x5	1xE5645	2.40	6	1x4GB	1333MHz	3.5"		4xHot-swap	SATA	DVD±RW	0/1/5/10	IPMI	2xGb	Mar 11
RD230	4011-1BU	1x5	1xE5645	2.40	6	1x8GB	1333MHz	3.5"	Battery	4xHot-swap	SATA/SAS ⁴	DVD±RW	0/1/5/6/10	KVM	2xGb	Mar 11
RD230	4011-1CU	1x5	2xX5650	2.66	12	2x8GB	1333MHz	3.5"	Battery	4xHot-swap	SATA/SAS	DVD±RW	0/1/5/6/10	KVM	2xGb	Mar 11
RD230	4011-1DU	1x5	1xE5645	2.40	6	1x4GB	1333MHz	3.5"		4xHot-swap	SATA	DVD±RW	0/1/5/10	KVM	2xGb	Mar 11

• These models have a 3-year limited warranty¹

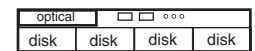
• These small and medium business (SMB) models are part of the US TopSeller™ Program

Processor(s)	Up to two processors, one or two processors standard, Intel® Xeon® Processor E5603 with quad-core, 4.8GT/s (giga-transfers/second) QPI (QuickPath Interconnect), Intel 64, Virtualization Technology, 1066MHz DDR3 memory controller, and 4MB cache or Intel Xeon Processor E5606 with quad-core, 4.8GT/s QPI, Intel 64, Virtualization Technology, 1066MHz DDR3 memory controller, and 8MB cache or Intel Xeon Processor E5607 with quad-core, 4.8GT/s QPI, Intel 64, Virtualization Technology, 1066MHz DDR3 memory controller, and 8MB cache or Intel Xeon Processor E5620 with quad-core, 5.86GT/s QPI, Intel 64, Hyper-Threading Technology, Virtualization Technology, Turbo Boost Technology, 1066MHz DDR3 memory controller, and 12MB cache or Intel Xeon Processor E5645 with six-core, 5.86GT/s QPI, Intel 64, Virtualization Technology, 1333MHz DDR3 memory controller, and 12MB cache or Intel Xeon Processor X5650 with six-core, 6.4GT/s QPI, Intel 64, Hyper-Threading Technology, Virtualization Technology, Turbo Boost Technology, 1333MHz DDR3 memory controller, and 12MB cache	Two LGA1366 sockets
Memory	4GB, 8GB, or 16GB std, 64GB max (32GB per processor), RDIMM, PC3-10600 1333MHz DDR3*, ECC, Memory Mirroring, eight 240-pin DIMM sockets** * System automatically clocks down for processors with 1066MHz DDR3 memory controller ** Over four DIMMs requires dual processors	
Graphics	Onboard Aspeed AST2050 graphics/management processor, one VGA DB-15 on rear, 8MB; Maximum resolution: 1600x1200@60Hz	
Disk bays	16U/17U/18U/19U/1AU/1DU: Four 3.5" hot-swap (HS) SATA disk bays 1BU/1CU: Four 3.5" hot-swap (HS) SATA/SAS disk bays	
Disk controller	16U/17U/18U/19U/1AU/1DU: Serial ATA, SATA 3.0Gb/s, integrated in chipset, RAID ⁰ 0, 1, 5, 10 support ThinkServer 8708EM2 SAS RAID Controller, PCI Express [®] bus, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1, 5, 6, 10 support, Battery backed cache integrated 1BU/1CU:	
Optical	UltraSlim Enhanced DVD±RW	
Diskette	None (use USB port)	
Ethernet	Two Gigabit Ethernet ports, dual Intel 82574L controllers	
Chipset	Intel 5500 Chipset, Intel I/O Hub (IOH) for PCI Express slot (see right), enterprise south bridge interface (ESI) to Intel I/O Controller Hub 10 RAID (ICH10R) for USB, onboard SATA controller	
Riser card	(See Right) One PCI Express 2.0 x16 slot standard	
Front ports	Two USB 2.0	
Rear ports	Four USB 2.0, external monitor (VGA DB-15), serial (9-pin), two ethernet (RJ-45)	
Internal port	One USB 2.0 connector	
Diagnostics	Diagnostic and system status LEDs on front panel	
Systems mgmt	Onboard Aspeed AST2050 graphics/management processor IPMI model(s): IPMI 2.0-compliant baseboard management controller (BMC), storage over IP, remote platform flash, BIOS update, USB 2.0 virtual hub KVM model(s): IPMI functions PLUS KVM supported, 24bit high quality video compression	
Prerequisites	Monitor, keyboard, mouse, SATA/SAS disk, rack, OS	
Keyboard	None (use USB port)	
Mouse	None (use USB port)	
Power supply(s)	One 600 watts standard, one maximum, variable speed fan, auto-sensing, no redundancy	
Cooling	Five fans standard, five maximum, variable speed	

1U Rack top



Front



Rear



- 1U Mechanical; rack-mount only
- Black color front; metal case
- 17.2"W x 22.4"D x 1.72"H
- 436mm W x 568mm D x 43.6mm H
- 37.7 lb (17kg) max configuration
- Toolless top cover removal
- Toolless disk and optical drive removal
- Toolless adapter retention

Bay 1	5.25", 0.5" high, external, std optical
Bay 2	3.5", 1" high, external, optional disk
Bay 3	3.5", 1" high, external, optional disk
Bay 4	3.5", 1" high, external, optional disk
Bay 5	3.5", 1" high, external, optional disk

Slot 1: half-length, full-height, PCI Express 2.0 x16

Virtualization

Virtualization ready, VMWare Ready™ certified

Power-On Hotkey

- Setup Utility: DEL at startup
- Network Boot: F12 at startup
- Onboard SATA RAID: Ctrl+I at startup
- Add-on SATA/SAS RAID: Ctrl+H at startup

Software Management Tools

- ThinkServer EasyStartup

Security

- Administrator password
- User password
- Boot sequence control
- Boot without keyboard, mouse, diskette
- Serial port I/O control
- USB port disablement (all)

RoHS-compliant